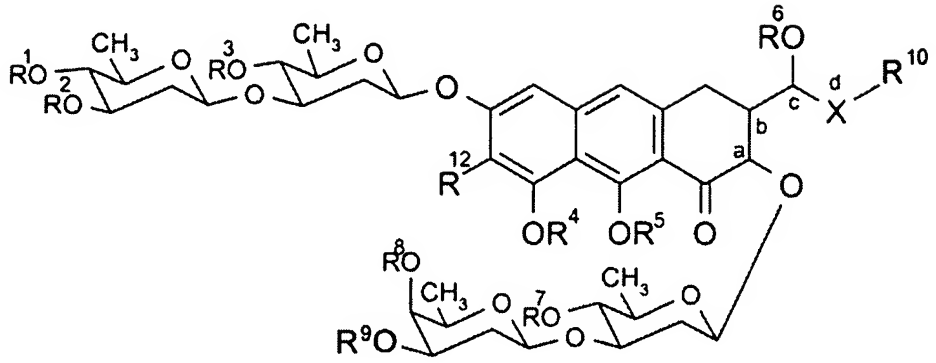
What is claimed is:

1. A compound having the following formula:



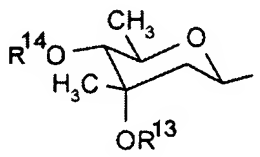
wherein

R^1, R^2, R^3, R^4, R^5, R^6, R^7 and R^8 are each, independently, hydrogen or a protecting group;

X is C=O or $CH(OR^{11})$, wherein R^{11} is hydrogen or a protecting group;

R^{10} is OH when X is C=O or $C(O)CH_3$ when X is $CH(OR^{11})$;

R^9 is hydrogen, a protecting group or



;

R^{12} is methyl or hydrogen; and

the stereochemistry at carbons a, b and c is R, S or mixtures thereof, and when X is $CH(OR^{11})$, the stereochemistry of d is R or S.

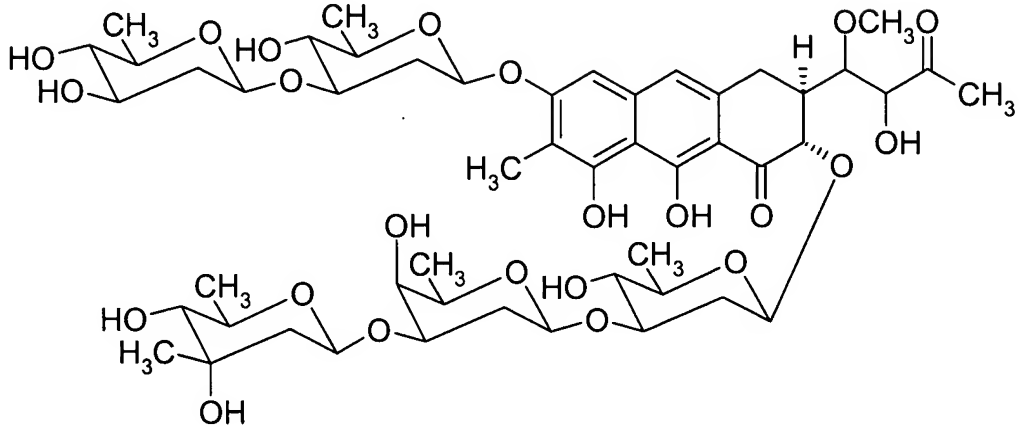
2. The compound of claim 1, wherein the protecting group comprises an alkyl group, a cycloalkyl group, a heterocyloalkyl group, a hydroxyalkyl group, a halogenated alkyl group, an alkoxyalkyl group, an alkenyl group, an alkynyl group, an aryl group, a heteroaryl group, an aralkyl group, an ester, a carbonate group, a carboxylic acid, an aldehyde, a keto group, an ether group, a urethane group, a silyl group, a sulfo-oxo group, or a combination thereof.

3. The compound of claim 1, wherein when R^{11} is a protecting group, the protecting group is an alkyl group selected from the group consisting of methyl, ethyl, propyl, isopropyl, butyl, isobutyl and pentyl.

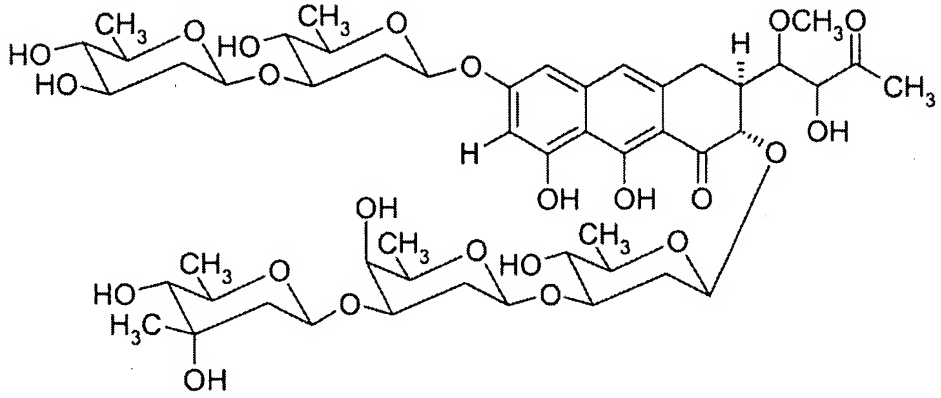
4. The compound of claim 1, wherein the stereochemistry at carbons a, b and c is S, and the stereochemistry at d when X is CH(OH) is R.

5. The compound of claim 1, wherein R^1, R^2, R^3, R^4, R^5, R^7, R^8, R^9, R^{11} are hydrogen; R^{13} and R^{14} are methyl; the stereochemistry at carbons a, b, and c is S; and the stereochemistry at d when X is CH(OH) is either R or S.

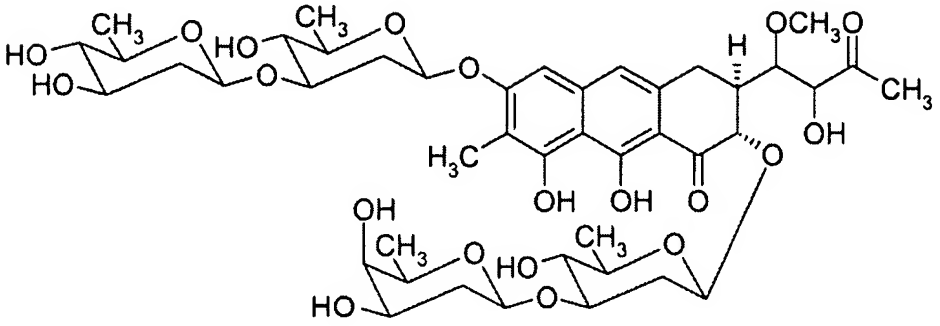
6. The compound of claim 1 having the following formula:



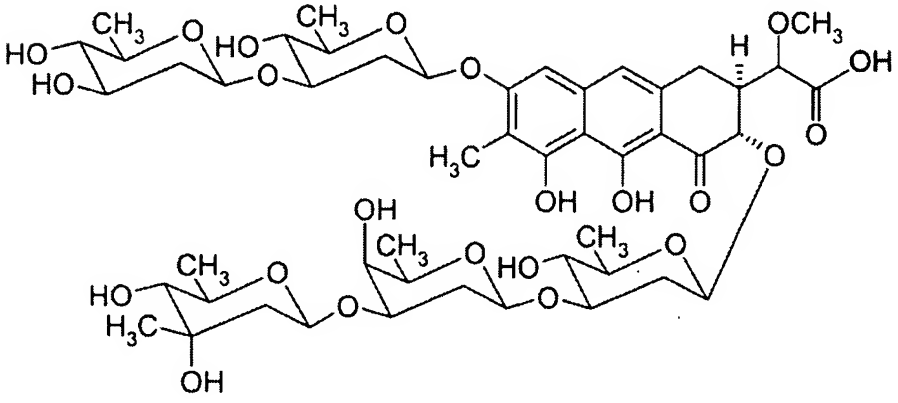
7. The compound of claim 1 having the following formula:



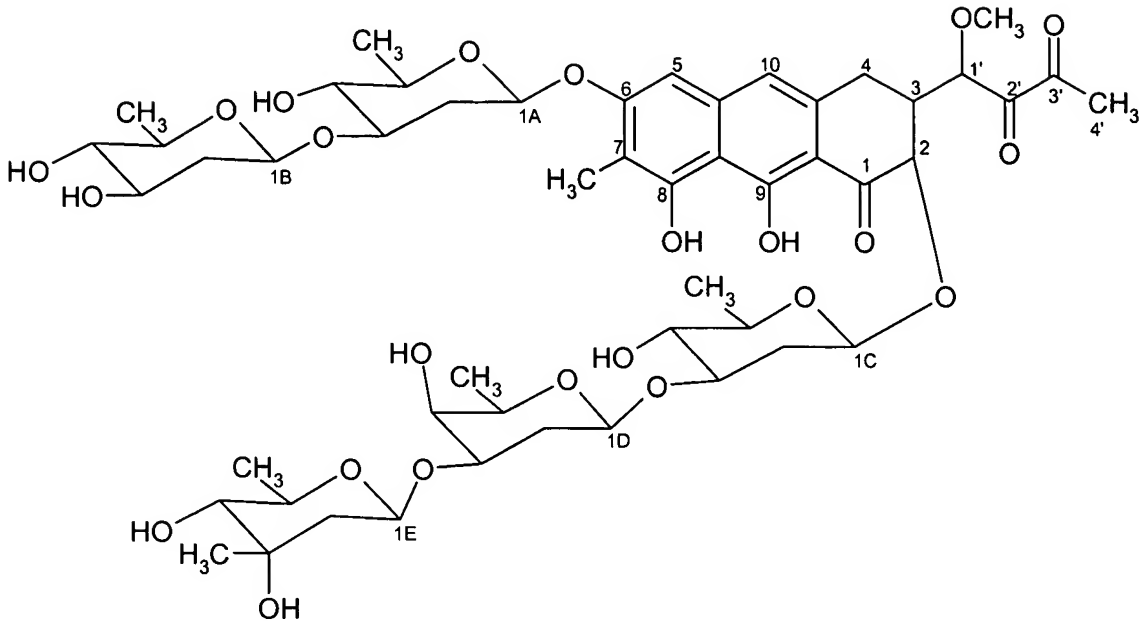
8. The compound of claim 1 having the following formula:



9. The compound of claim 1 having the following formula:



10. The compound of claim 1 having the following formula:



11. A method of inhibiting growth of a tumor cell, comprising contacting the cell with the compound of any of claims claim 1 and 6-10.

12. The method of claim 11, wherein the cell is *in vitro*.

13. The method of claim 11, wherein the cell is *in vivo*.

14. The method of claim 11, wherein the cell is from a mammal.

15. The method of claim 14, wherein the mammal is a human.

16. A method of treating cancer in a subject diagnosed with cancer, comprising administering to the subject an effective amount of the compound of claim 1 in a pharmaceutically acceptable carrier, whereby the compound treats the cancer in the subject.

17. A method of treating cancer in a subject diagnosed with cancer, comprising administering to the subject an effective amount of the compound of claim 6 in a pharmaceutically acceptable carrier, whereby the compound treats the cancer in the subject.

18. A method of treating cancer in a subject diagnosed with cancer, comprising administering to the subject an effective amount of the compound of claim 7 in a pharmaceutically acceptable carrier, whereby the compound treats the cancer in the subject.

19. A method of treating cancer in a subject diagnosed with cancer, comprising administering to the subject an effective amount of the compound of claim 8 in a pharmaceutically acceptable carrier, whereby the compound treats the cancer in the subject.

20. A method of treating cancer in a subject diagnosed with cancer, comprising administering to the subject an effective amount of the compound of claim 9 in a pharmaceutically acceptable carrier, whereby the compound treats the cancer in the subject.

21. A method of treating cancer in a subject diagnosed with cancer, comprising administering to the subject an effective amount of the compound of claim 10 in a pharmaceutically acceptable carrier, whereby the compound treats the cancer in the subject.

22. The method as in any one of claims 16-21, wherein the cancer is selected from the group consisting of lung, colon, ovary, prostate, testicle, melanoma, kidney, breast, central nervous system, pancreas and leukemia.

23. The method of claim 22, wherein the subject is a mammal.

24. The method of claim 22, wherein the mammal is a human.

25. The method of claim 22, wherein the amount of the compound is from about 0.1

mg/kg to about 100 mg/kg of body weight.

26. A method of treating Paget's Disease in a subject, comprising administering to the subject an effective amount of the compound of any on of claims 1 and 6-10.

27. The method of claim 26, wherein the subject is a mammal.

28. The method of claim 27, wherein the mammal is a human.

29. The method of claim 26, wherein the amount of the compound is from about 0.1 mg/kg to about 100 mg/kg of body weight.

30. A method of treating hypercalcemia in a subject diagnosed with hypercalcemia, comprising administering to the subject an effective amount of the compound of any one of claims 1 and 6-10 in a pharmaceutically acceptable carrier.

31. The method of claim 30, wherein the subject is a mammal.

32. The method of claim 31, wherein the mammal is a human.

33. The method of claim 30, wherein the amount of the compound is from about 0.1 mg/kg to about 100 mg/kg of body weight.

34. A method of treating hypercalcuria in a subject diagnosed with hypercalcuria, comprising administering to the subject an effective amount of the compound of any one of claims 1 and 6-10 in a pharmaceutically acceptable carrier.

35. The method of claim 34, wherein the subject is a mammal.

36. The method of claim 35, wherein the mammal is a human.

37. The method of claim 34, wherein the amount of the compound is from about 0.1 mg/kg to about 100 mg/kg of body weight.

38. A method of treating a neurological disease, comprising administering to the subject an effective amount of the compound of any one of claims 1 and 6-10 in a pharmaceutically acceptable carrier.

39. The method of claim 38, wherein the subject is a mammal.

40. The method of claim 39, wherein the mammal is a human.

41. The method of claim 38, wherein the amount of the compound is from about 0.1 mg/kg to about 100 mg/kg of body weight.

42. A mutant *Streptomyces argillaceus* lacking a nucleic acid that encodes an active ketoreductase.

43. The mutant of claim 33, wherein the nucleic acid is an *mtmW* gene.

44. The mutant of claim 33, wherein the mutating step involves an insertional mutation of the *mtmW* gene.

45. A compound produced by the mutant *Streptomyces argillaceus* M7W1 of claim 42.

46. A method of making a mutant *Streptomyces argillaceus* M7W1 comprising mutating a *mtmW* gene of *Streptomyces argillaceus* to produce a mutated gene, whereby the mutated gene does not encode active ketoreductase.

47. The method of claim 46, wherein after the mutating step, the mutated gene is inserted into *Streptomyces argillaceus*.

48. A method of making the compound in any one of claims 1 and 6-10 comprising the steps of incubating the mutant *Streptomyces argillaceus* M7W1 to produce a composition comprising the compound, and isolating the compound from the composition.

49. A pharmaceutical composition comprising a carrier and a compound in any one of claims 1 and 6-10.